



Iowa Student Identifier/Locator System



**WEB APPLICATION:
UNIQUE STUDENT ID**

**ESCHOLAR UNIQ_ID SYSTEM VERSION 2.0^{©™}
SUPPLEMENT**

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About this Document

Version 2.1 of the “State ID System” User Guide is the next version of the old draft version 2.0 and is much improved in scope and contents.

This document is prepared to serve as a supplement to version 2.0 for use by those users who already started using version 2.0 User Guide and are looking for more information but are not ready yet to start using version 2.1.

For ease of use, this document references the page numbers of version 2.0 and explains the changes that took place there.

Users are advised to start using the latest version of the User Guide, version 2.1, as soon as possible. This version is available for download at Department of Education’s Web Site.

Summary of Major Changes

The core functionality of the “State ID” application and the overall structure and flow of the User Guide on both versions 2.0 and 2.1 remain mostly the same.

Enhancements have been made in version 2.1 in the following areas:

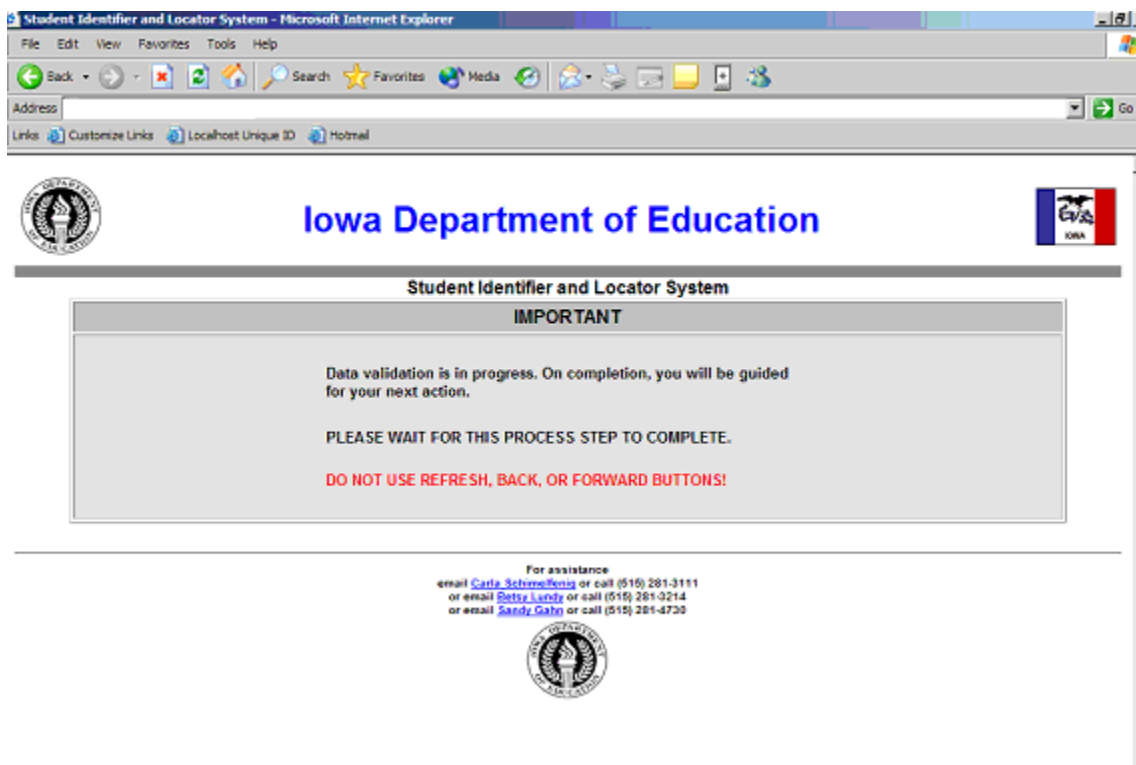
- Additional screens/interfaces
- Changes to certain existing screens
- Content enhancement/changes
- Updated Quick Guides
- Additional Hints and Notes

Major additions/changes in the above areas are explained in the following pages.

Screen Interfaces – Additions and Changes

Page 14 – Validating the Data

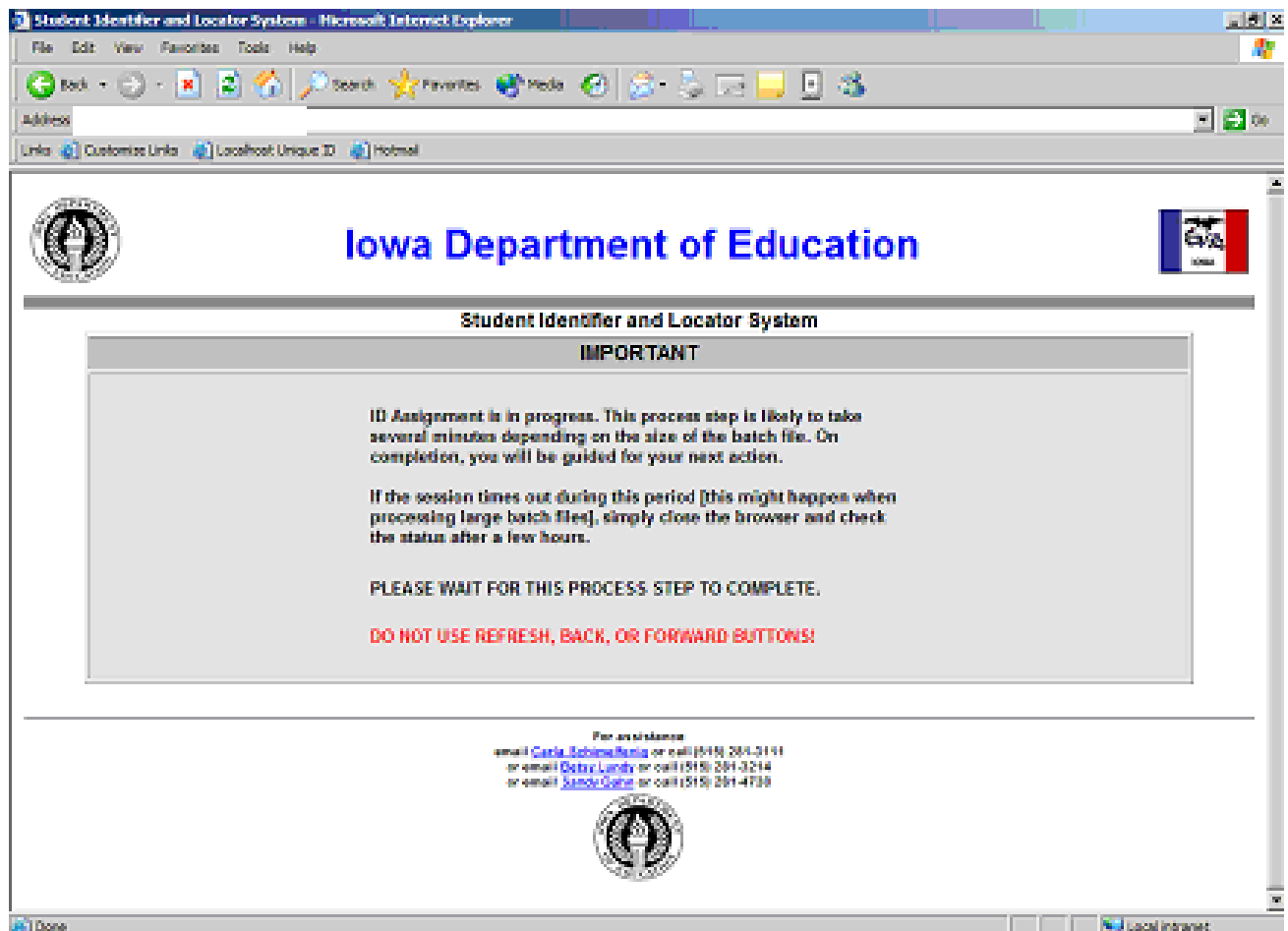
When the user clicks the “Validate Data” button, a new intermediate screen similar to the following one will be displayed before taking the user to the next process step. This new screen is introduced to keep the user better informed about the current process and its importance.



This screen will be visible until the validation process completes and then the user will be taken to the next step.

Page 19 – Summary of the Batch File After Validation

When the user clicks the “Assign ID” button, a new intermediate screen similar to the following one will be displayed before taking the user to the next process step. This new screen is introduced to keep the user better informed about the current process and its importance.



This screen will be visible until the “ID Assignment” process completes and then the user will be taken to the next step.

Page 22/23 – Addressing the Near Matching/Duplicate Records

In “Resolve Near Matches/Duplicates Screen”, the user will be in a position to see the potential “Near Match/Duplicate” student’s school information by clicking the hyperlink on “School Code”. The following screenshot better illustrates that feature.

MOOTZ	MELANIE	R		10/02/1989	FEMALE
Assign Selected	Create New ID	Cancel Record	Select Another Record		

Near Matches / Duplicates Found									
	Last Name	First Name	Middle Name	Suffix	Date Of Birth	Gender	District Code	School Code	Match Probability
<input type="radio"/>	MOOTZ	MELANIE	R		10/02/1989	FEMALE	0009	0101	0.999 [MATCH]

SCHOOL INFORMATION	
District	0009
District Name	Eastern Valley School District
School	0101
Name	Eastern Valley High School
P.O Box	
Street	
City	Demo City
State	DD
Zip	
Contact	William Knudson
Title	Principal
Phone	(323) 345-6456
Fax	(323) 345-6457
Email	rm@sss.xyz.abc

Page 33 – Searching for an Individual Student – Search Criteria Entry

The “Search Individual Student” screen has been changed to make it simple and easy to use / manage:

The screenshot displays the "Student Identifier and Locator System" web application. The page title is "Iowa Department of Education". The main heading is "Student Identifier and Locator System". Below this, there is a "Search Individual Student" section. A "Current Login" field shows "0009 Location: 0009-0101 Eastern Valley High School" and a "State ID Home" button. The "Search Using State Student ID" section has a "State ID" input field and a "Search" button. A red horizontal line separates this from the "Search Using Student Details" section. The "or" label is circled in red. The "Search Using Student Details" section has a "First Name" field with "VOS", a "Middle Name" field, a "Last Name" field with "BRANDON", and a "Date of Birth" field. A "Required Fields" label is circled in red. There are "Clear" and "Search" buttons at the bottom of the form.

The label “[or]” is introduced to clearly inform the user that at any time, the user can search the “ISN Locator Database” either by using the “State ID” at the top section or by using student details at the bottom section.

To query based on student details, the user should at the minimum enter “First Name” and “Last Name” of the student.

Page 34 – Searching for an Individual Student – Student Information

In “Search Individual Student” output, additional screenshots are provided to illustrate the display of full history information when history exists for a student in the ISN Locator Database.

Student Identification and Locator System										
Search Individual Student										
Current Login: 0009 Location: 0009-0101 Eastern Valley High School									State ID Home	
Student Information [State ID: 1181483657]										
First Name:	Brandon			Middle Name:		Last Name:	Vos		Suffix:	
School:	0009-0101 Eastern Valley High School			Res. Dist:	0009	Local Student ID:			Grade:	07
Gender:	MALE			Date Of Birth:	06/26/1986	Ethnicity:	WHITE, NOT OF HISPANIC ORIGIN		Sch. Yr:	2003
Created:	05/23/2004			Last Updated:	05/25/2004	Update Ref #:	51			
Search Another										
History Information										
History Date:	Last Name	First Name	Middle Name	Suffix	Gender	Date Of Birth	Race/Ethnicity	District	School	
05/25/2004	VOSS	BRANDON			MALE	06/26/1986	WHITE, NOT OF HISPANIC ORIGIN	0009	0101	

List of history information

History Information										
History Date	Last Name	First Name	Middle Name	Suffix	Gender	Date Of Birth	Race/Ethnicity	District	School	
05/25/2004	VOSS	BRANDON			MALE	06/26/1986	WHITE, NOT OF HISPANIC ORIGIN	0009	0101	
History Date: 06/12/2004										
First Name:	BRANDON			Middle Name:		Last Name:	VOSS		Suffix:	
School:	0009-0101 Eastern Valley High School			Res. Dist:	0009	Local Student ID:	106041963		Grade:	07
Gender:	MALE			Date Of Birth:	06/26/1986	Ethnicity:	WHITE, NOT OF HISPANIC ORIGIN		Sch. Yr:	2005
Created:	06/12/2004			Last Updated:	06/12/2004	Update Ref #:	1445			

The above “History Information” pop-up appears when the user clicks the “History Date” hyperlink.

Contents - Enhancement/Changes

Page 4 & 5 - Important Terms

The new version of the “Important Terms” in version 2.1 is provided below:

A number of terms will be used throughout this manual that may be unfamiliar to the user. Take a minute to review these important terms before beginning:

Term	Meaning
Batch File	<p>An Operating System file that will contain a group of student records in a pre-defined format. Four different types of batch files are used in the “State ID System”. They are:</p> <p>Input “Student Info” file Output “IDs Assigned” file Output “Errors to Fix” file Output “Near Matches/Duplicates to Resolve” file</p> <p>Refer to “Input and Output Files Interfaces” section at the end of version 2.1 User Guide for more information about these types of files.</p>
DE	Iowa Department of Education
Duplicate	Match probability that falls in a given range. This range is higher than the “Near Match” range. Example: All matching outcomes reported with a Match Probability value between 0.9 to 0.9999 may be considered as “Duplicate”
Edit	An action to be performed by the user for fixing any data validation errors in the input student record before the ID assignment process. Users will be in a position to fix these errors using “State ID System” online screen interface.
Error	Incorrect / incomplete / missing information in the input student data identified by the “State ID System” validation process. Errors on the input records need to be fixed before creating ID for a student.
Gender	Indicates the gender of the students being reported, either Male or Female
ID	Same as ISN
Identifier	A number that represents an individual
ISN	Iowa Student Number; a 10 digit state-assigned Identifier for every PK-12 public school student in the state
ISN Locator Database	The database used by the Iowa Student Identification/Locator System. This database includes the ISN and student identifying information.

Term	Meaning
ISN Locator System	The software, processes, and documentation that allow for the location and assignment of the ISN.
Match Probability	A fractional value (less than 1) that represents the matching level of a pair of student records. "State ID System" gives this value as the outcome of matching a pair of student records using probabilistic methods
NCLB	The No Child Left Behind federal legislation signed into law on January 8, 2002.
Near Match	Match probability that falls in a given range. This range is lower than the "Duplicate" range. Example: All matching outcomes reported with a Match Probability value between 0.4 to 0.9 may be considered as "Near Match"
Probability of Match	Same as Match Probability
PK-12	Grades pre-kindergarten through 12 th .
Radio Button	A screen interface in most applications that allow a user to choose only one choice from a group of many choices.
Status Column	The column that normally appears in most of the screens in the "State ID System", that displays the current status of a batch
State ID	Same as ISN
Student Information System (SIS)	A software application that administers and maintains student information in a school / school district, such as Enrollment, Scheduling, Attendance, Accounting and Grade reporting.
Unique Student ID	An identifier used for only one individual student. Same as ISN

Page 46 to 48 – File Layouts

Various types of input and output files used in the “State ID System”, their usage/importance are explained in detail.

The revised content of this section in version 2.1 is provided in the following pages:

Appendix B - Input And Output Files Interfaces

Four different types of batch files are used in the “State ID System”. They are:

Input “Student Info” File

Output “IDs Assigned” file

Output “Errors to Fix” file

Output “Near Matches/Duplicates to Resolve” file

The input file is extracted from the local SIS and uploaded into the “ISN Locator System” for ID assignment. The output files are extracted and downloaded from the “ISN Locator System” at different stages of ID Assignment process.

a) All of these files contain three different types of record in the following order:

A header record as the first record with “TH” as the record type

One or more student detail records with “ID” as the record type

A trailer record as the last record with “TT” as the record type

b) The fields in all of the above record types are delimited by tab

c) All of these files will have a predefined list of fields

For a file to be valid, all of the requirements need to be met.

Input “Student INFO” file

This file is the student information file extracted from the local SIS System and uploaded into the “ISN Locator System” for “State ID” assignment.

This file will contain the following fields in the “ID” type record in order.

Record ID – will always have “ID”

School Number

Resident District

Student Last Name

Student First Name

Student Middle Name

Student Suffix

Gender

Birth Date

Grade Level

Local Student ID

Social Security Number

Race / Ethnicity

State Student ID (will be blank prior to first time ID creation)

Output "IDs assigned" file

Once an input student information file is completely processed by the System, users will extract and download this file from the "ISN Locator System". The format of this file is exactly the same as that of the input file, except that the last column "State Student ID" will contain the "State ID" assigned to the student by the "ISN Locator System". This file will only contain only those records of the input file for which "State ID" is assigned either automatically by the System (or) by resolving "Near Matches/Duplicates" by the User.

This file will contain the following fields in the "ID" type record in order.

Record ID – will always have "ID"

School Number

Resident District

Student Last Name

Student First Name

Student Middle Name

Student Suffix

Gender

Birth Date

Grade Level

Local Student ID

Social Security Number

Race / Ethnicity

State Student ID (will have "State ID" assigned by the System)

Output "Errors to Fix" file

Users can download this file for offline analysis/reference purpose after the data validation stage, if the System reports one or more records had data validation error. Once all the errors are addressed, this file will not be accessible, because these records in the corresponding batch file are not waiting for fixing errors any more.

This file will have all the fields in the input batch file in the same order. In addition, there will be 3 more fields added at the end of the record to contain the following information. They are:

Record Status: Will always have the value "Waiting to Fix Errors"

Record Reference Number: For future use (An internally generated number assigned to every input record to identify it uniquely within the System). It is not the "State ID" Number. **Error List:** Will contain the list of validation errors that the input record encountered during the validation process. If more than one error

was found in a record, all errors are listed with each one delimited from the other by a semicolon.

This file will contain only those records that had at least one error that need to be fixed by the user prior to proceeding with "ID Assignment" process for the batch.

This file will contain the following fields in the "ID" type record in order.

Record ID - will always have "ID"

School Number

Resident District

Student Last Name

Student First Name

Student Middle Name

Student Suffix

Gender

Birth Date

Grade Level

Local Student ID

Social Security Number

Race / Ethnicity

State Student ID

Record Status

Record Reference Number

Error List

Output "Near Match/Duplicates to Resolve" file

Users can download this file for offline analysis/reference purpose after the "ID Assignment" stage, if the System reports one or more "Near Matches/Duplicates". Once all these "Waiting to Resolve Near Matches/Duplicates" were addressed, this file will not be accessible, because these records in the corresponding batch file are not "Waiting to Resolve Near Matches/Duplicates" any more.

This file will have all the fields in the input batch file in the same order. In addition, there will be 3 more fields added at the end of the record to contain the following information. They are:

Record Status: Will always have the value ""Waiting to Resolve Near Matches"

Record Reference Number: For future use (An internally generated number assigned to every input record to identify it uniquely within the System). It is not the "State ID" Number.

Match / Near Match List: Will contain the list of "State ID" of the students in the "ISN Locator Database" that the input record had encountered as a "Near Match" or "Match". If more than one "Near Match" or "Match" was found for the record,

all corresponding "State ID" are listed with each one delimited from the other by a semicolon.

This file will contain only those records that had encountered at least one "Near Match" or "Match" with the "ISN Locator Database" during the "ID Assignment" process.

This file will contain the following fields in the "ID" type record in order.

Record ID - will always be "ID"

School Number

Resident District

Student Last Name

Student First Name

Student Middle Name

Student Suffix

Gender

Birth Date

Grade Level

Local Student ID

Social Security Number

Race / Ethnicity

State Student ID

Record Status

Record Reference Number

Match / Near Match List

Quick Guides - Updated

All the Quick Guides have been reviewed and updated. The revised version of these guides from version 2.1 is provided in the following pages.

Quick Guide to Assigning “State ID” for Batch Files

1. Extract the file from the local Student Information System (SIS) using vendor documentation. Save the file in a location easy to remember.
2. Login to www.edinfo.state.ia.us (BEDS website)
3. Click “State ID” web application.
4. Click “Upload Batch File” button
5. Click Browse.
6. Find the extracted file on your computer. Click “File” and click “Open”.
7. Click “Upload”.
8. Check the status message in the confirmation page.
 - If file not uploaded due to errors in the file, correct them in the local SIS and return to step 1.
 - If file successfully uploaded, go to step 9.
9. Click “Validate data”
10. Wait for the process to complete
11. Check for the status message in the confirmation page
 - If errors were reported:
 - Click “Fix Errors” and fix each record. Once you address all records, click “Proceed to ID Assignment” to go to Step 12
 - If no errors were found, you will be directly taken to Step 12
12. Click “Assign State ID”
13. Wait for the process to complete
14. Check for the status message in the confirmation page
 - If “Near Matches/Duplicates” were reported, click “Resolve Near Matches/Duplicates”, review and resolve them one by one. For every record, take any one of the following actions:
 - If the input student record and one of the reported “Near Matches/Duplicates” are one on the same, check the radio button of the corresponding “Near Match/Duplicate” record and click “Assign Selected”
 - If the input student record is not the same as any one of the reported “Near Matches/Duplicate” record, click “Create New ID”
 - If you determine that an input record came to this stage by error or can’t be resolved, click “Cancel Record”. After taking any of the above action, carefully look at the confirmation message and proceed to the next record by clicking “Select Another Record”.
 - If you can’t determine at this time, skip this record temporarily by clicking “Select Another Record”. This record is still “Waiting to Resolve Near Matches/Duplicates” and you need to revisit this record later to resolve the near match.

Once all records are resolved, you will be directly taken to Step 15.

- If no “Near Matches/Duplicates” were found you will be directly taken to Step 15.

15. Click “Download State ID”. System will extract the file and will show you the link to download the extracted file to your local computer.

16. Download the file and verify

- Through a web browser by double clicking on the link
- To download the file:
 - Right click on link provided. Select Save Target As . . .
 - Select location to save your download on your computer from the “Save In:” dropdown at the top of the “Save As” screen.
 - Change the downloaded filename in “File name:” box, if you desire.
 - Click “Save”.
 - Select “Open” to view and verify the downloaded file or Close

17. Select “State ID Home” or “Return to State ID Home” to return to the “State ID” main page.

18. Select another function or press EXIT on “State ID” page.

19. Select EXIT in the Application Menu to log out.

20. Close the Browser.

Quick Guide to Assigning “State ID” for Individual Students Online

1. Login to www.edinfo.state.ia.us (BEDS website)
2. Click “State ID” web application.
3. Click “Enter Individual Student” button.
4. Enter all the information for the student. Fields marked with “*” are required fields.
5. Click “Assign “State ID”
 - If “Near Matches/Duplicates” are reported, click “Resolve Near Matches/Duplicates”, and resolve. For resolving a “Near Match/Duplicate”, you will take any one of the following action:
 - If the input student record and one of the reported “Near Matches/Duplicates” are one on the same, check the radio button of the corresponding “Near Match/Duplicate” record and click “Assign Selected”.
 - If the input student record is not the same as any one of the reported “Near Matches/Duplicate” record, click “Create New ID”.
 - If you determine that an input record came to this stage by error or can’t be resolved, click “Cancel Record”.
 - If you can’t determine at this time, click “State ID Home” to return to the “State ID” main page to perform another action or exit from the application. This record is still “Waiting to Resolve Near Matches/Duplicates” and you need to revisit this record later and resolve the near match.
Once you resolved the record, you will be taken to Step 6.
 - If there are no “Near Matches/Duplicates”, you will be directly taken to Step 6.
6. Make a note of the confirmation message. If an ID is assigned, the assigned ID Number is displayed
7. If you want to download the entered student details with the assigned “State ID”, Click “Download State ID” button. The System will extract the file and will show you the link to download the same to your local computer.
8. Download the file and verify
 - Through a web browser by double clicking on the link
 - To download the file:
 - Right click on link provided. Select Save Target As . . .
 - Select location to save your download on your computer from the “Save In:” dropdown at the top of the “Save As” screen.
 - Change the download filename in “File name:” box, if you desire.

- Click "Save".
 - Select "Open" to view and verify the downloaded file or "Close"
- 9. Select "State ID Home" or "Return to State ID Home" to return to the "State ID" main page.
- 10. Select another function or press EXIT on "State ID" page.
- 11. Select EXIT in the Application Menu to log out.
- 12. Close the Browser.

Quick Guide to Search for an Individual Student Online

1. Login to www.edinfo.state.ia.us (BEDS website)
2. Click "State ID" button.
3. Click "Search Individual Student" button.
4. In the "Search Individual Student" screen, you can do two types of searches.
 - 4a. To search for a student based on the "State ID", use the top portion of the screen. In the "State ID" field, enter the 10-digit "State ID" of the student and click "Search".
 - If a matching student is found in the "ISN Locator Database", the matching student's information will be displayed in the next screen. If any history information is available in the database, it is shown in the bottom portion. You can see the complete details of a history record by clicking the hyperlink on the "History Date". To return back to the search screen and search for another student click "Select Another".
 - If no matching record is found in the database, the search screen will display the message "No Matches Found".
 - 4b. To search for a student based on the student details, enter Student Name and Date of Birth at the bottom portion of the search screen and click "Search". At the minimum, you need to enter the student's full "First Name" and "Last Name" to search.

The System will search for the matching records in the "ISN Locator Database". This search is done based on probabilistic methods and hence the results will show both the matches as well as the Near Matches with the value of the match probability.

 - If no matches were found it will display "No matches found".
 - If one or more "Near Matches" or "Matches" were found, the System will display them in the descending order of match probability at the bottom of the "Search Individual Student" screen. To view the full details of a given matched record, click on hyperlink in either "First Name" or "Last Name".
 - This will show the matching student's information in the next screen. If any history information is available in the database, it is shown in the bottom portion. You can see the complete details of a history record by clicking the hyperlink on the "History Date". To return back to the search screen and search for another student click "Select Another".
5. Click "Clear", reenter another search criteria to continue online search or click "State ID Home" to exit.

Note: The online Search provides the user with student information for only those students for whom the "State ID" is already created and stored in the "ISN Locator Database". Searching for an individual student will not change any details of the student in the "ISN Locator Database". To change the district or

building number of a student, the student information would need to be entered online through the “Enter Individual Student” function or uploaded in a batch file and processed through the “State ID” System.

Be aware that any search performed in the “State ID” application will create an entry into Usage Analysis tables with the details of search date & time, user login ID, and the search values entered. Unusual or excessive search requests will be investigated.

Quick Guide to Downloading Output Batch Files

1. Log into www.edinfo.state.ia.us (BEDS website).
2. Click "State ID" button.
3. Click "Extract & Download Batch" button.
4. Enter/Select filtering criteria to limit the number of batches displayed
 - "From" Date [batches uploaded from this date only will be considered].
 - "To" Date [batches uploaded up to this date only will be considered]
 - Download Type [only the batches that are currently in the selected processing stage will be considered]. Possible values are:
 - i. IDs Assigned – Fully processed batch files ("State ID" assigned).
 - ii. Errors To Fix – Batch files that have pending validation errors to be fixed.
 - iii. "Near Matches/Duplicates to Resolve" - Batch files that have student records waiting to "Resolve Near Matches/Duplicates".
5. Click "Submit". System will display the list of batches that matches the selected filter details.
6. Click the "Extract" button of a desired batch, to extract. System will extract a file containing the selected type of records and show a link to the extracted file.
7. Download the file and verify.
 - Through a web browser by double clicking on the link.
 - To download the file:
 - Right click on link provided. Select "Save Target As . . ."
 - Select location to save your download on your computer from the "Save In:" dropdown at the top of the "Save As" screen.
 - Change the download filename in "File name:" box, if you desire.
 - Click "Save".
 - Click "Open" to view and verify the downloaded file or "Close"
8. Select "State ID Home" or "Return to State ID Home" to return to the "State ID" main page.
9. Select another function or press EXIT on "State ID" page.
10. Select EXIT in the Application Menu to log out.
11. Close the Browser.

Additional Hints and Notes

Additional Hints and Notes are introduced at various places through out the document in version 2.1